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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,442	05/24/2001	Kaoru Matsumoto	109611	9807

25944 7590 05/20/2002

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EXAMINER

ELKASSABGI, HEBA

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 05/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/863,442

Applicant(s)

MATSUMOTO, KAORU

Examiner

Heba Elkassabgi

Art Unit

2834

ME

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Blower for office automation equipment with close disposition of stator wire.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over English et al. (U.S. Patent 4682065) and further in view of Takahashi (U.S. Patent 5663604) and Plunkett (U.S. Patent 4554941).

4. English et al. illustrates in Figure 2 an air impeller unit in which the bearings (22 and 24) are at the center of a cylindrical housing with the bearings (22 and 24) are supported by the shaft (20). The motor yoke (18) is supported onto the shaft (20) and the permanent magnet (16) located at the inner periphery of the impeller (12), with the impeller located on the outer periphery of the shaft (20) and a housing base portion

(28). However, English et al. does not show a stator core with a stator coil wound around the core and the coil disposed on the inside of the magnet and a circuit board mounted with an electronic circuit and a partition plate interposed between the stator coil and circuit board.

5. Takahashi discloses in Figure 1 a fan (1) with the stator core (20) having a stator coil (28) wound around the core and located on the inner periphery of the magnet (50) and a conductive supporting plate (which is also a lid) (8) located between the stator core (20) and circuit board (54), for the purpose of reducing the overall size of the motor and maintaining the desired mounting area of the circuit board.

6. Plunkett illustrates in Figure 3 a fan with the electric circuit components (48) mounted onto a circuit board (44), for the purpose of decreasing the required current.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify English et al. by adding the stator coil on the inside of the magnet with a supporting plate between the stator coil in order to reduce the overall size of the motor and mounting a circuit board with an electric circuit component to decrease the required current.

With regards to the case portion of claim 2, the combination of the housing base portion (28) of English et al. with the supporting plate (8) of Takahashi would sustain.

7. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over English et al. (U.S. Patent 4682065) and further in view of Takahashi (U.S. Patent 5663604) and Plunkett (U.S. Patent 4554941) as applied to Claim 2 and in further view of Permuy (U.S. Patent 6031306).

8. English et al., Takahashi, and Plunkett substantially teaches the claimed invention except that it does not show a casing portion with cooling fins disposed at the outer peripheral wall. Permuy illustrates in Figure 1 a fan with cooling fins (32) located on the outer periphery of the casing portion (4 and 24), for the purpose of dissipating heat outside the casing.

It would have been obvious at the time of the invention was made to a person having ordinary skill in the art to modify the invention of English et al., Takahashi, and Plunkett as applied to claim 2 by adding the cooling fins disposed at the outer peripheral wall of the casing portion to dissipate heat outside the casing.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heba Elkassabgi whose telephone number is (703) 305-2723. The examiner can normally be reached on M-Th (6:30-3:30), and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone


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numbers for the organization where this application or proceeding is assigned are (703) 305-3431 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

HYE
May 16, 2002


NESTOR RAMIREZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800